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#11/B

CLEAN VERSION OF AMENDMENTS

1. A tagging-free method to detect the binding of untagged single stranded nucleic acid to an untagged material of interest, comprising the steps of:

B1 (A) providing a sensor comprised of a first layer and a second layer wherein said first layer comprises an untagged single stranded nucleic acid and wherein said second layer comprises a photoluminescent material, and wherein said first layer and said second layer are separate layers;

(B) exposing said sensor to a biological sample for sufficient time for said untagged single stranded nucleic acid to bind to an untagged material of interest in said biological sample;

(C) applying light to said sensor; and

(D) measuring photoluminescence from said sensor, wherein photoluminescence measured in said step of exposing is indicative of binding of said untagged single stranded nucleic acid to said untagged material of interest.

B2 20. The tagging-free method of claim 1, wherein said first layer comprises a plurality of sections each of which comprises a different untagged single stranded nucleic acid sequence.